

Title (en)

ELECTRICALLY CONDUCTIVE ADHESIVE HYDROGELS WITH SOLUBILIZER

Title (de)

ELEKTRISCH LEITFÄHIGE KLEBENDE HYDROGELE MIT SOLUBILISATOREN

Title (fr)

HYDROGELS ADHESIFS ELECTROCONDUCTEURS AVEC AGENT DE SOLUBILISATION

Publication

EP 1694375 B1 20110302 (EN)

Application

EP 04816849 A 20040908

Priority

- US 2004029258 W 20040908
- US 74094203 A 20031218

Abstract (en)

[origin: US2005137276A1] A composition providing electrically conductive adhesive hydrogels suitable for use as skin contact adhesives and, particularly, suitable for use as an electrical interface for disposable medical devices. The present hydrogels provide for reduced skin irritation and/or odor properties, hydrate a subject's skin, readily wet around a subject's skin surface hair, and protect against burning of a subject upon or due to electrical stimulation through the hydrogel. These hydrogels generally include a monomer, a first initiator, a solubilizer, and a cross-linking agent. The present hydrogels also desirably include a buffer system to help prevent discoloration of the hydrogels and/or hydrolysis of the hydrogels as well as to improve shelf-life. Other additives such as conductivity enhancers, pharmaceuticals, humectants, plasticizers, skin health agents, etc. may be added to the present hydrogels either before or after curing.

IPC 8 full level

A61L 31/14 (2006.01); **A61K 47/40** (2006.01); **C09J 9/02** (2006.01)

CPC (source: EP US)

A61L 31/145 (2013.01 - EP US); **C09J 9/02** (2013.01 - EP US); **Y10S 524/916** (2013.01 - EP US); **Y10S 525/936** (2013.01 - EP US); **Y10S 525/937** (2013.01 - EP US)

Cited by

CN107929805A; GB2442819A

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

US 2005137276 A1 20050623; **US 7045559 B2 20060516**; CA 2546372 A1 20050707; CA 2546372 C 20120605; DE 602004031666 D1 20110414; EP 1694375 A2 20060830; EP 1694375 B1 20110302; JP 2007521385 A 20070802; JP 4729501 B2 20110720; MX PA06006700 A 20060823; WO 2005061017 A2 20050707; WO 2005061017 A3 20051201

DOCDB simple family (application)

US 74094203 A 20031218; CA 2546372 A 20040908; DE 602004031666 T 20040908; EP 04816849 A 20040908; JP 2006545324 A 20040908; MX PA06006700 A 20040908; US 2004029258 W 20040908